### Profiling the Leading Causes of Death in the United States

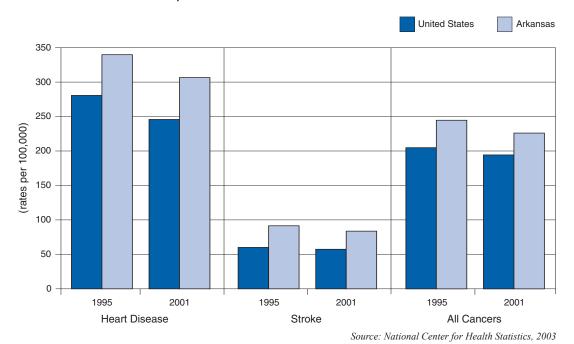
Heart Disease, Stroke, and Cancer



### **Chronic Diseases: The Leading Causes of Death**

#### The Leading Causes of Death

United States and Arkansas, 1995 and 2001



#### The Burden of Chronic Disease

Chronic diseases—such as heart disease, stroke, cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems. Seven of every ten Americans who die each year, or more than 1.7 million people, die of a chronic disease.

### **Reducing the Burden of Chronic Disease**

Chronic diseases are not prevented by vaccines, nor do they just disappear. To a large degree, the major chronic disease killers are an extension of what people do, or not do, as they go about the business of daily living. Health-damaging behaviors—in particular, tobacco use, lack of physical activity, and poor nutrition—are major contributors to heart disease and cancer, our nation's leading killers. However, tests are currently available that can detect breast cancer, colon cancer, heart disease, and other chronic diseases early, when they can be most effectively treated.



### The Leading Causes of Death and Their Risk Factors

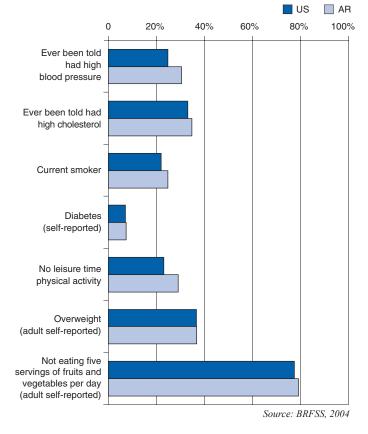
#### **Heart Disease and Stroke**

Heart disease and stroke are the first and third leading causes of death for both men and women in the United States. Heart disease is the leading cause of death in Arkansas, accounting for 8,263 deaths or approximately 30% of the state's deaths in 2001 (the most recent year for which data are available). Stroke is the third leading cause of death, accounting for 2,256 deaths or approximately 8% of the state's deaths in 2001.

#### **Prevention Opportunities**

Two major independent risk factors for heart disease and stroke are high blood pressure and high blood cholesterol. Other important risk factors include diabetes, tobacco use, physical inactivity, poor nutrition, and being overweight or obese. A key strategy for addressing these risk factors is to educate the public and health care practitioners about the importance of prevention. All people should also partner with their health care providers to have their risk factor status assessed, monitored, and managed in accordance with national guidelines. People should also be educated about the signs and symptoms of heart attack and stroke and the importance of calling 911 quickly. Forty-seven percent of heart attack victims and about the same percentage of stroke victims die before emergency medical personnel arrive.

#### Risk Factors for Heart Disease and Stroke, 2003



#### Cancer

Cancer is the second leading cause of death and is responsible for one of every four deaths in the United States. In 2004, over 560,000 Americans—or more than 1,500 people a day—will die of cancer. Of these annual cancer deaths, 6,100 are expected in Arkansas. About 1.4 million new cases of cancer will be diagnosed nationally in 2004 alone. This figure includes 14,800 new cases that are likely to be diagnosed in Arkansas.

#### Estimated Cancer Deaths, 2004

Cause of death	US	AR
All Cancers	563,700	6,100
Breast (female)	40,110	380
Colorectal	56,730	630
Lung and Bronchus	160,440	2,060
Prostate	29,900	280

Source: American Cancer Society, 2004

#### **Prevention Opportunities**

Preventive Screening Trends, 2002

The number of new cancer cases can be reduced and many cancer deaths can be prevented. Adopting healthier lifestyles—for example, avoiding tobacco use, increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure—can significantly reduce a person's risk for cancer. Making cancer screening, information, and referral services available and accessible is essential for reducing the high rates of cancer and cancer deaths. Screening tests for breast, cervical, and colorectal cancers reduce the number of deaths by detecting them early.

#### US AR 20% 40% 60% 80% 100% Did not have a mammogram in the last 2 years (age 50+) Did not have a Pap smear in the last 3 years Did not have a sigmoidoscopy/colonoscopy in the last 5 years (age 50+) Did not have a fecal occult blood test (FOBT) in the last year (age 50+) Had a prostate-specific antigen (PSA) test in the last year (age 50+) Had a digital rectal exam in the last year (age 50+)

Source: BRFSS, 2003





## Arkansas' Chronic Disease Program Accomplishments

## **Examples of Arkansas' Prevention Successes**

- Statistically significant decreases in cancer deaths among men across all races, with the greatest decrease occurring among African Americans (436.6 per 100,000 in 1990 versus 380.1 per 100,000 in 2000).
- A 10% decrease in the number of individuals age 18 and older who reported having no leisure time activity (37.4% in 1996 versus 27.4% in 2002).
- Prevalence rates for nonsmoking among African Americans and Hispanics that were higher than the corresponding national rate (61.0% for African Americans and 61.5% for Hispanics in Arkansas versus 52.0% nationally).

# **CDC's Chronic Disease Prevention and Health Promotion Programs**

In collaboration with public and private health organizations, CDC has established a national framework to help states obtain the information, resources, surveillance data, and funding needed to implement effective chronic disease prevention programs and ensure that all Americans have access to quality health care. CDC funding and support enable state health departments to respond efficiently to changing health priorities and effectively use limited resources to meet a wide range of health needs among specific populations. The table below is a breakdown of the CDC's funding awards to Arkansas in the areas of cancer, heart disease, stroke, and related risk factors.

#### CDC Cancer, Heart Disease, Stroke, and Related Risk Factor Funding for Arkansas, FY 2003

SURVEILLANCE	
Behavioral Risk Factor Surveillance System (BRFSS)  Arkansas BRFSS	\$117,882
National Program of Cancer Registries  Arkansas Cancer Registry	\$687,319
CHRONIC DISEASE PREVENTION AND CONTROL	
Cardiovascular Health Program Arkansas Chronic Illness Collaborative Arkansas Wellness Coalition The Delta States Stroke Consortium	\$300,000
Diabetes Control Program Arkansas Diabetes Prevention and Control Program	\$306,133
National Breast and Cervical Cancer Early Detection Program  Arkansas Breast and Cervical Cancer Early Detection Program	\$2,390,475
National Comprehensive Cancer Control Program  Cancer Control Team	\$409,509
WISEWOMAN	\$0
MODIFYING RISK FACTORS	
National Tobacco Prevention and Control Program Arkansas Tobacco Prevention & Control Program	\$970,397
State Nutrition and Physical Activity/Obesity Prevention Program	\$0
Racial and Ethnic Approaches to Community Health (REACH 2010)	\$0
Total	\$5,181,715

The shaded area(s) represents program areas that are not currently funded. The above figures may contain funds that have been carried over from a previous fiscal year.

#### **Additional Funding**

CDC's National Center for Chronic Disease Prevention and Health Promotion funds additional programs in Arkansas that fall into other health areas. A listing of these programs can be found at http://www.cdc.gov/nccdphp/states/index.htm.





### **Opportunities for Success**

## Chronic Disease Highlight: Cardiovascular Disease and Preventable Risk Factors

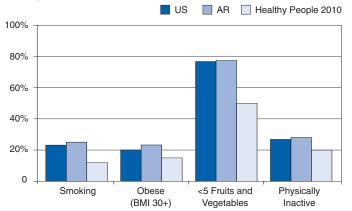
In 2001, Arkansas had the 9th highest heart disease death rate in the nation and the highest stroke death rate. From 1996 to 2000, the heart disease death rate in Arkansas was 583 per 100,000, compared with the national rate of 536 per 100,000. From 1991 to 1998, the stroke death rate was 163 per 100,000, compared with the national rate of 121 per 100,000.

This increased burden of disease is most probably explained by the higher prevalence of cardiovascular risk factors in the state's population. Data from the Behavioral Risk Factor Surveillance System (BRFSS) for 2003 show that obesity rates doubled from 13.2% in 1991 to 25.2% in 2003. In 2003 the percentage of adult obesity in Arkansas (25.2%) was higher than the rate of adult obesity for the entire United States (22.8%). Data from the BRFSS for 2003 indicate that when compared with the United States as a whole, more adults in Arkansas were at risk for high blood pressure (30.5% in Arkansas versus 24.8% nationally) and more were physically inactive (29.1% in Arkansas versus 23.1% nationally).

In addition to overweight and obesity, diet can affect the level of blood cholesterol, a major risk factor for heart disease. To reduce the prevalence of these risk factors, Arkansas has created initiatives such as the *Arkansas 5-A-Day Coalition's Worksite Challenge* and has established the *Child Health Advisory Committee* to encourage healthy eating and physical activity, and to combat childhood obesity.

Text adapted from Cardiovascular Disease in Arkansas: Mortality, Costs, Disparity, and Risk Factors (June 2002)

### Prevelance of Cardiovascular Disease Behavior Risk Factors BRFSS, 2000



Source: Arkansas Bureau of Vital Statistics

#### **Disparities in Health**

African Americans make up approximately 15.7% of Arkansas' population and, as do most African Americans in the United States, experience health disparities in significant proportions. Nationally, and in Arkansas, African American women, in particular, have higher rates of death attributed to breast and cervical cancer than other racial and ethnic groups.

Although African American women in Arkansas are more likely than white women to have had a mammogram in the last 2 years (82.0% for African Americans versus 79.7% for whites), in 2000, the breast cancer death rate was higher for African American women than for white women (38.3 per 100,000 versus 21.2 per 100,000 for white women). The same holds true for cervical cancer screening and cervical cancer death rates. African American women are more likely to report having had a Pap smear in the last 3 years (86.5% of African American women versus 79.7% of white women), but they have higher rates of death from cervical cancer. From 1990 to 2000, the cervical cancer death rate for African American women in Arkansas was 136% higher than the cervical cancer death rate for white women (7.8 per 100,000 for African American women versus 3.3 per 100,000 for white women).

Between 1996 and 2000, African American women in Arkansas also had a higher heart disease death rate than white women (601 per 100,000 for African American women versus 455 per 100,000 for white women). In addition, the death rate for stroke between 1991 and 1998 was higher among African American women than among white women (207 per 100,000 for African American women versus 151 per 100,000 for white women).

#### **Other Disparities**

- **Diabetes:** African Americans have the highest rates of diabetes in Arkansas. Almost 10% of African Americans have been told they have diabetes, compared with 7.1% of whites and 6.7% of Hispanics.
- Physical Activity: In Arkansas, more African Americans report not meeting the recommended guidelines for moderate physical activity than whites (64.2% for African Americans versus 53.4% for whites).
- **Obesity:** African Americans report higher rates of obesity than whites (35.5% for African Americans versus 24.1% for whites).

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